

D3391-041/-043 FLOAT SKIDTUBE ASSEMBLY PARTS LIST

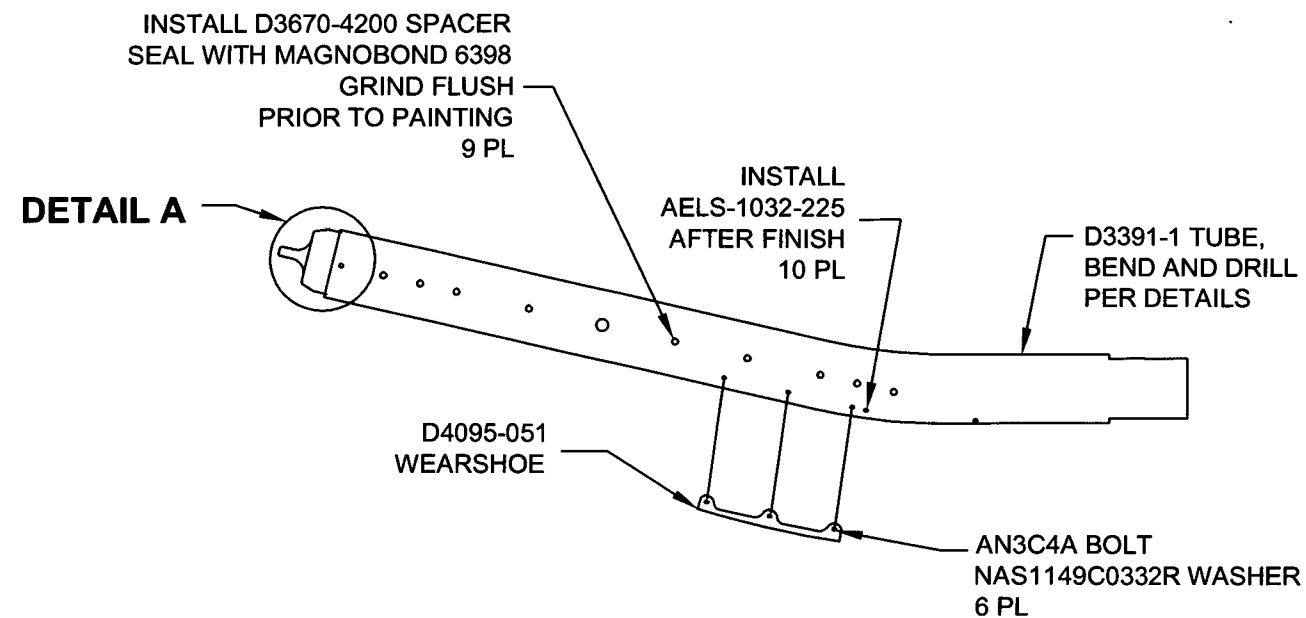
QTY -041	QTY -043	PART NUMBER	DESCRIPTION
X		D3391-041	FLOAT SKIDTUBE ASSEMBLY
	X	D3391-043	FLOAT SKIDTUBE ASSEMBLY
1		D3391-011	FWD TUBE ASSEMBLY
1		D3391-013	MID TUBE ASSEMBLY
1		D3391-015	AFT TUBE ASSEMBLY
	1	D3391-021	FWD TUBE ASSEMBLY
	1	D3391-023	MID TUBE ASSEMBLY
	1	D3391-025	AFT TUBE ASSEMBLY
2	2	D3591-1	BUSHING
4		D3672-3	WASHER
1	1	D4095-041	WEARSHOE
1	1	D4095-043	WEARSHOE
1	1	D4095-045	WEARSHOE
1	1	D4095-047	WEARPAD
1	1	D4095-049	WEARPAD
1	1	D4095-051	WEARSHOE
24	24	AN3C4A	BOLT
4	4	AN3C6A	BOLT
10	10	AN5C7A	BOLT
28	28	NAS1149C0332R	WASHER
10	10	NAS1149C0532R	WASHER
4		MS27039C4-12	SCREW
4		NAS1149C0432R	WASHER



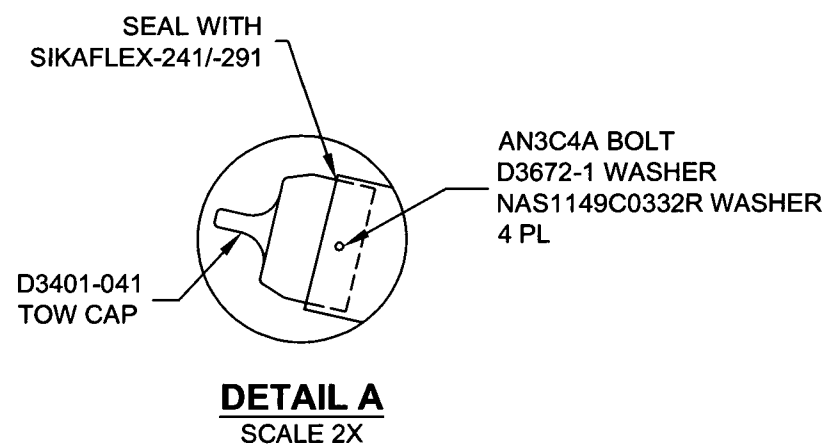
J	INCORPORATED DSI 9733, REFORMAT DRAWING CHANGED CBORE DEPTH (ZN D2-8, D2-9), REVISED TABLES, REPLACED POWDER COAT WITH PAINT	ML	16.01.14
I	REMOVE GASKETS AND REPLACE ALL WEARSHOES; PARTS LIST UPDATE, ZN A8-1, ZN A8-2, ZN A6-4, ZN B6-8; LPS-3 COATING REMOVED FROM NOTE 2, ZN A3-1, ZN A3-2, REMOVED INSERT AELS-1032-130, ZN B6-4, B2-4, C7-8, C3-8; REMOVED HOLES, ZN D6-4 ZN D2-4, ZN D7-8, ZN D3-8	XDF	11.10.13
H	DRAWING UPDATED TO CURRENT STANDARDS. SHT 1 PL ADDED D3591-1 BUSHING. ZN C6 Ø0.438 DIM WAS 4 PL. ADDED Ø0.499 DIM AND D3591-1 BUSHING. SHT 2 PL ADDED D3591-1 BUSHING. ZN C6 Ø0.438 DIM WAS 4 PL. ADDED Ø0.499 DIM AND D3591-1 BUSHING. (FOR FURTHER INFO SEE DSI 9364 & NCR 08-074)	AJS	08.08.20
G	REPLACE NAS INSERTS W/ AELS INSERTS SWITCH TO D3670-XXXX SPACERS FOR INSTALLING FLOAT BAGS, DWG REORGANIZED FOR CLARITY	DC	07.07.31
F	ADD SS WEARSHOE, GASKET REMOVE FWD SADDLE HOLE -011/-021	PH	07.01.18
E	CHANGE TOLERANCE, EASE MANUFACTURE	PH	06.04.25
D	UPDATE TOLERANCE, CHANGE HOLE SIZE	PH	06.01.23
C	LENGTHEN AFT EXTENSION	PH	05.09.27
B	DRAWING UPDATES	PH	05.06.10
A	NEW ISSUE	PH	05.02.07
REV	DESCRIPTION	BY	DATE
DESIGN	PH	DART AEROSPACE USA, INC EUGENE, OR	
DRAWN	ML		
CHECKED	CP	DRAWING NO.	REV. J
MFG. APPR.		D3391	SHEET 1 OF 11
APPROVED		TITLE	SCALE
DE APPR.		412 FLOAT SKIDTUBE	NTS
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2016 -04- 28  
ECN 16- 516



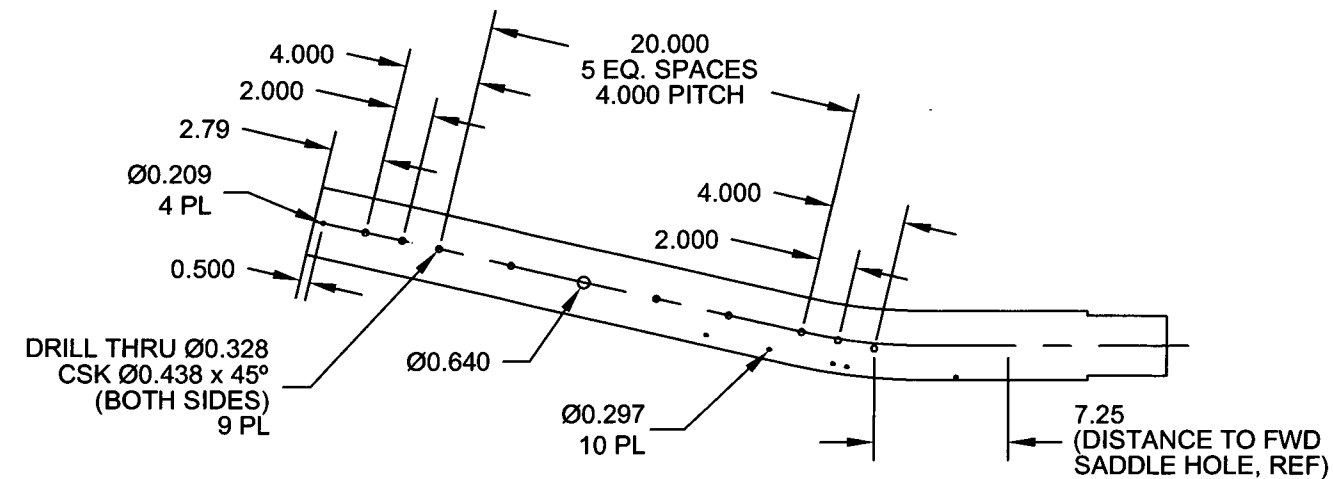


**D3391-011 FWD TUBE ASSEMBLY**  
ASSEMBLY DETAIL

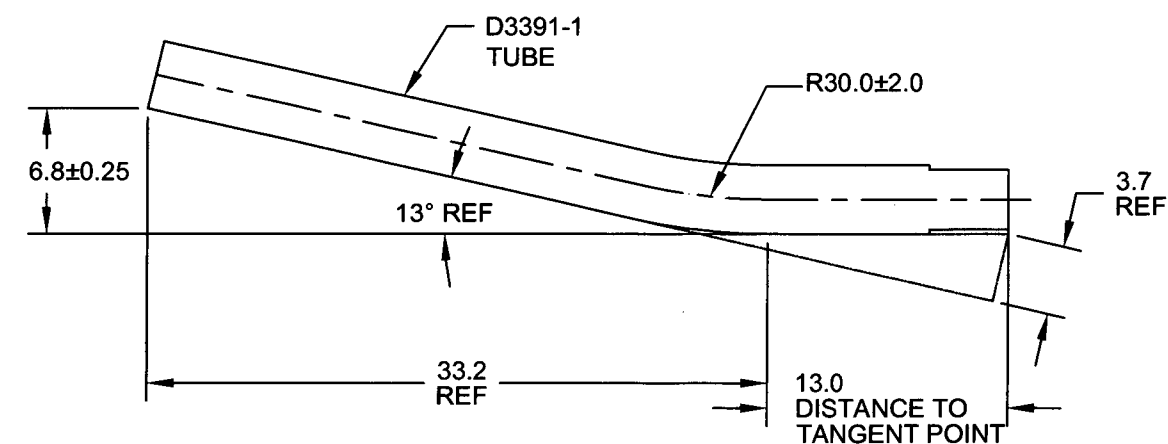


**D3391-011 FWD TUBE ASSEMBLY PARTS LIST**

QTY -011	PART NUMBER	DESCRIPTION
X	D3391-011	FWD TUBE ASSEMBLY
1	D3391-1	TUBE
1	D3401-041	TOW CAP
9	D3670-4200	SPACER
4	D3672-1	WASHER
1	D4095-051	WEARSHOE
10	AELS-1032-225	INSERT
10	AN3C4A	BOLT
10	NAS1149C0332R	WASHER



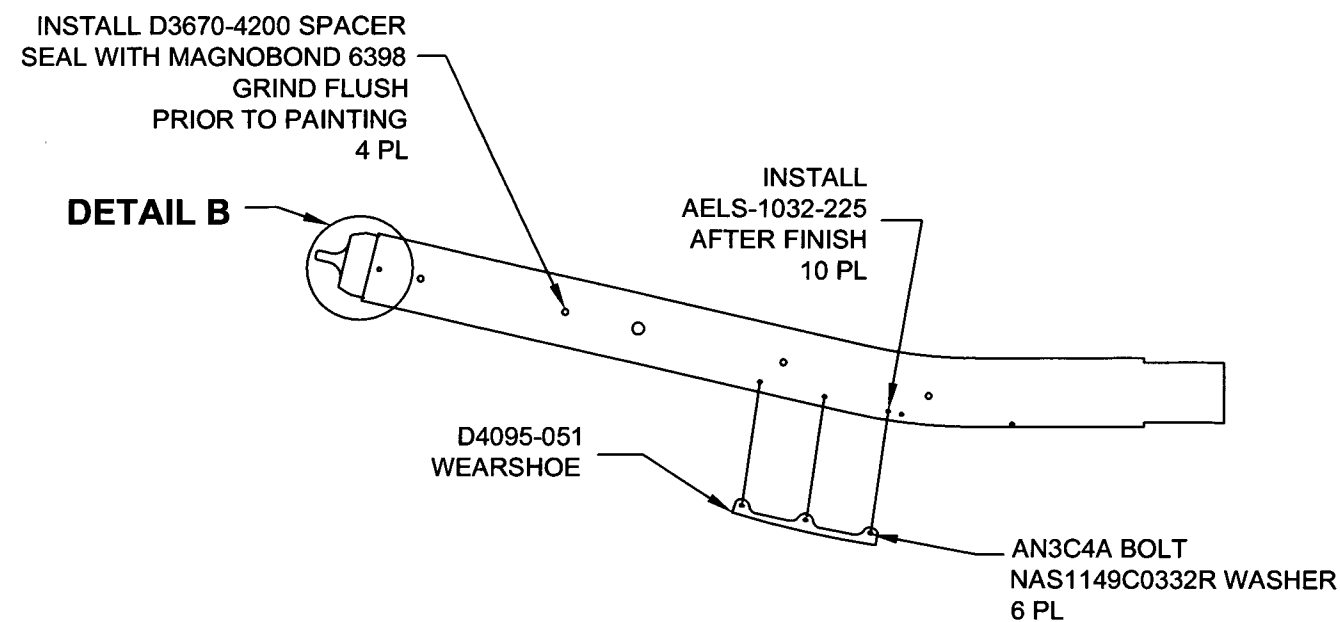
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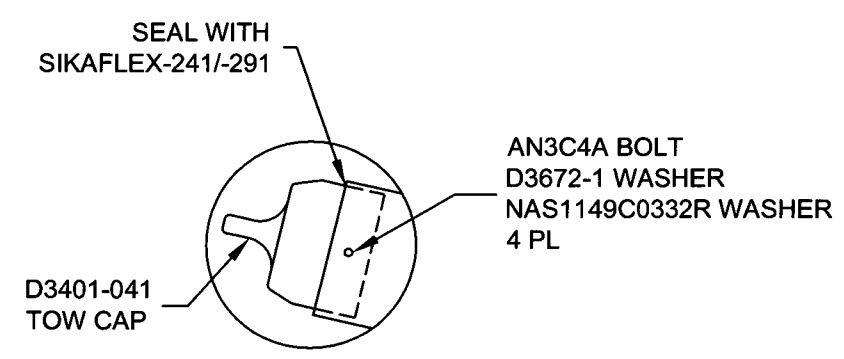
**D3391-011 BENDING DETAIL**  
(MAKE FROM D3391-1)

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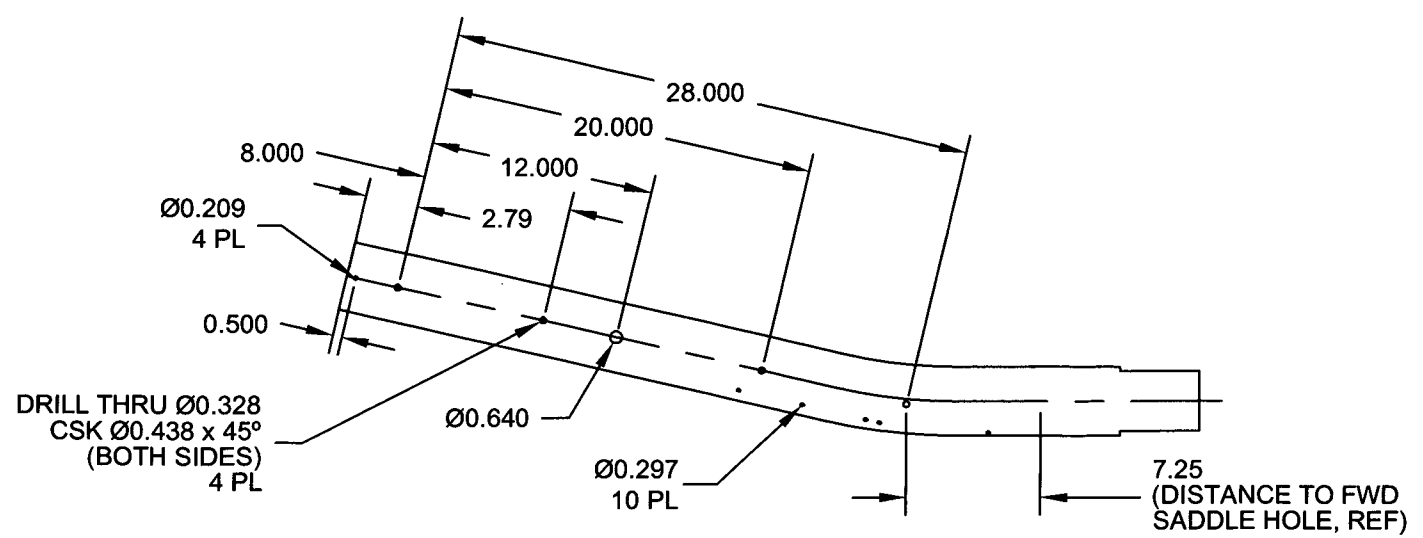
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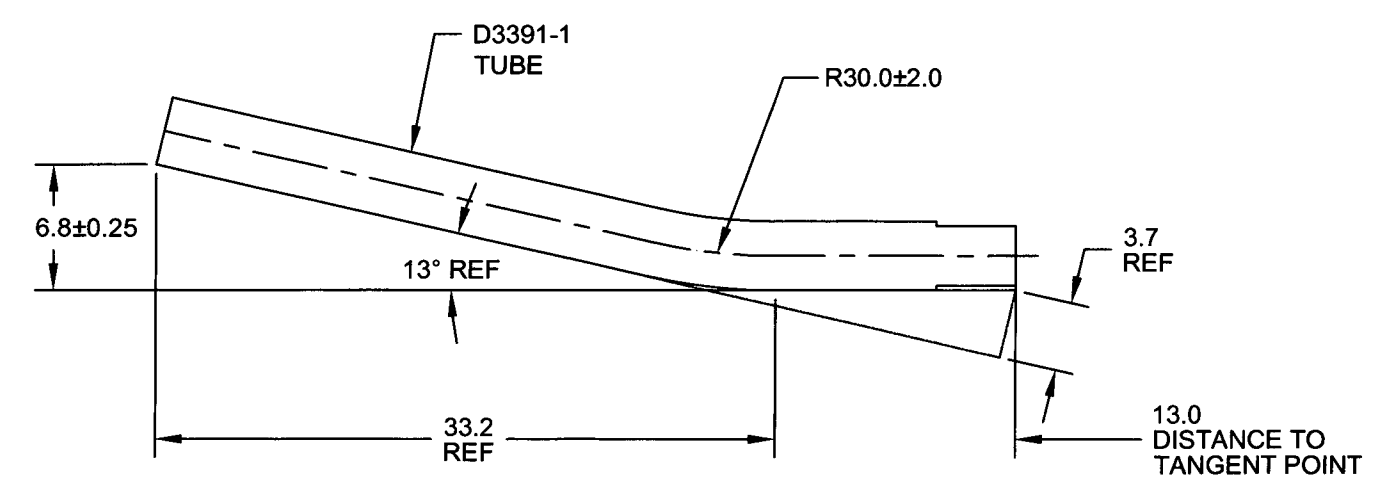
**D3391-021 FWD TUBE ASSEMBLY**  
ASSEMBLY DETAIL



**DETAIL B**  
SCALE 2X



**D3391-021 DRILLING DETAIL**



**D3391-021 BENDING DETAIL**  
(MAKE FROM D3391-1)

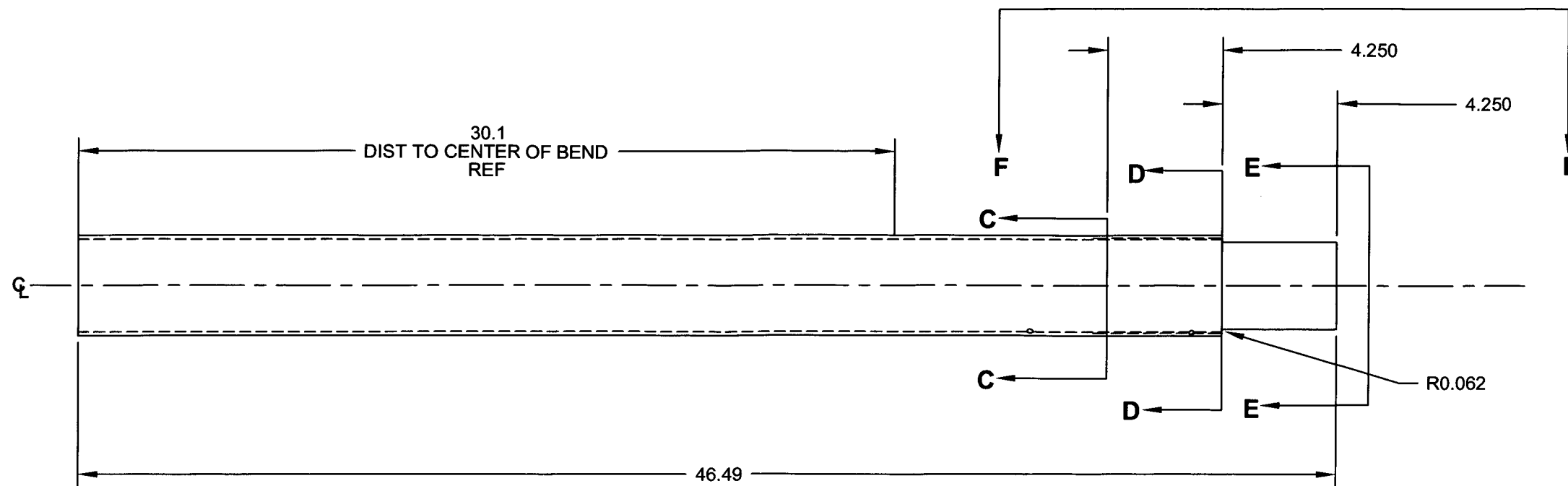
**D3391-021 FWD TUBE ASSEMBLY PARTS LIST**

QTY -021	PART NUMBER	DESCRIPTION
X	D3391-021	FWD TUBE ASSEMBLY
1	D3391-1	TUBE
1	D3401-041	TOW CAP
4	D3670-4200	SPACER
4	D3672-1	WASHER
1	D4095-051	WEARSHOE
10	AELS-1032-225	INSERT
10	AN3C4A	BOLT
10	NAS1149C0332R	WASHER

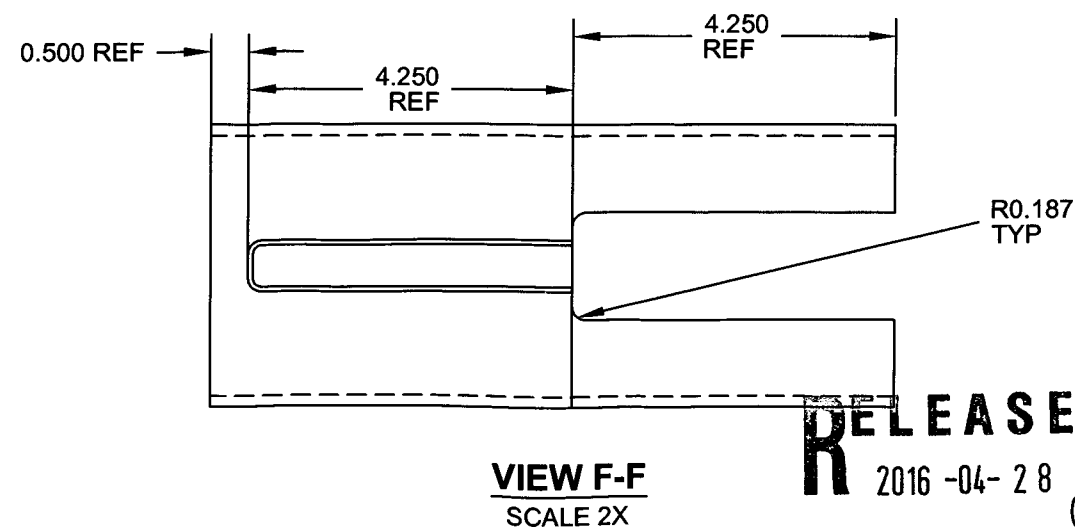
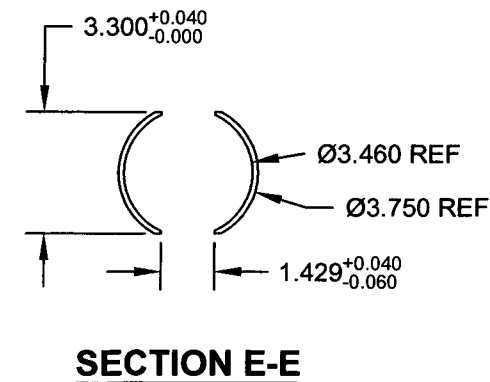
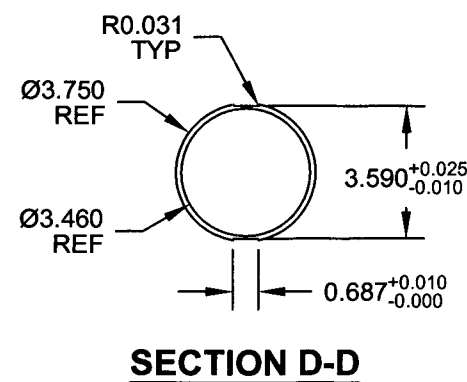
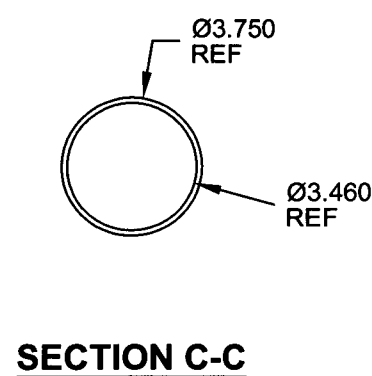
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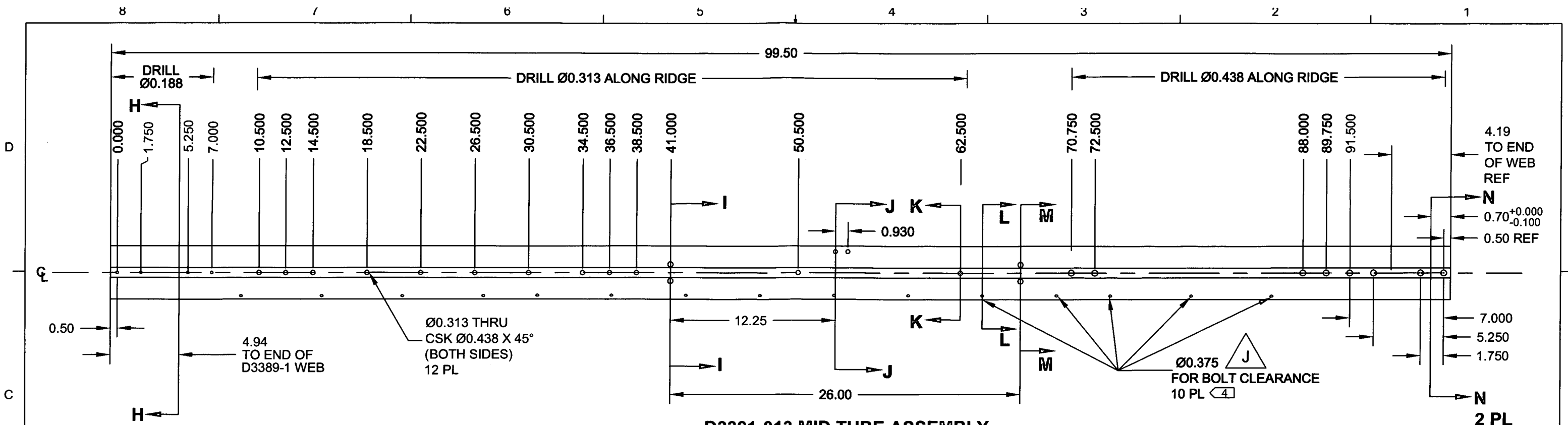


**D3391-1 TUBE**  
(MAKE FROM D6013-047 SKIDTUBE MATERIAL)

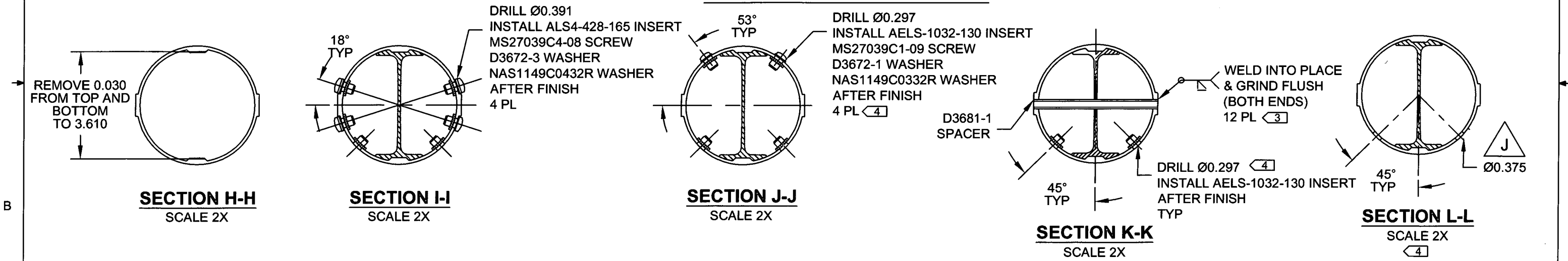


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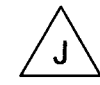


**D3391-013 MID TUBE ASSEMBLY**

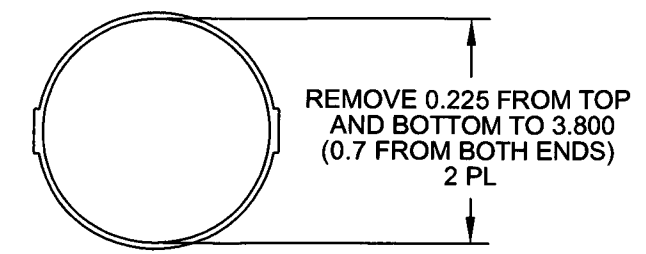


**D3391-013 MID TUBE ASSEMBLY PARTS LIST**

QTY -013	PART NUMBER	DESCRIPTION
X	D3391-013	MID TUBE ASSEMBLY
1	D2500-1-100	EXTRUSION
1	D3389-1	WEB
4	D3672-1	WASHER
4	D3672-3	WASHER
12	D3681-1	SPACER
24	AELS-1032-130	INSERT
4	ALS4-428-165	INSERT
4	MS27039C1-09	SCREW
4	MS27039C4-08	SCREW
4	NAS1149C0332R	WASHER
4	NAS1149C0432R	WASHER



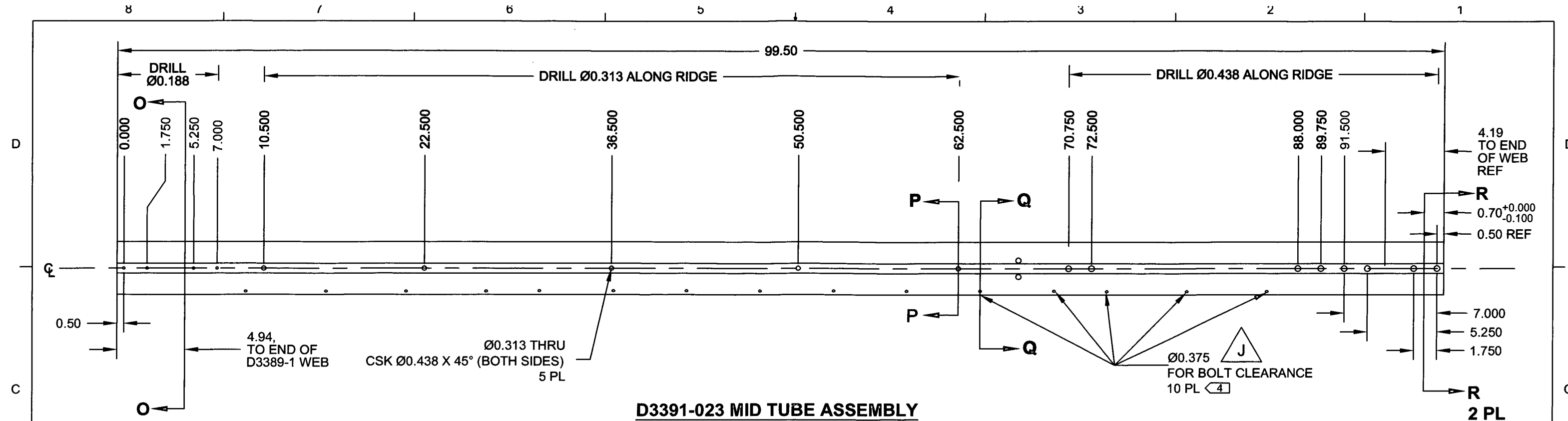
- D3391-013 MID TUBE ASSEMBLY**
- 1) MATERIAL: MAKE FROM D2500-1-100
  - 2) INSTALL D3389-1 WEB TO OUTER TUBE USING SIKAFLEX-241/-291 PER QSI 015
  - 3) WELDING: PER DART QSI 004
  - 4) USE DART DRILL TEMPLATE DT8217 TO LOCATE AND DRILL Ø0.297 AND Ø0.375 HOLES FOR WEARSHOE INSERTS AND NUTPLATES. CBORE AS NOTED AND INSTALL INSERT/NUTPLATES EXCEPT WHERE INDICATED.



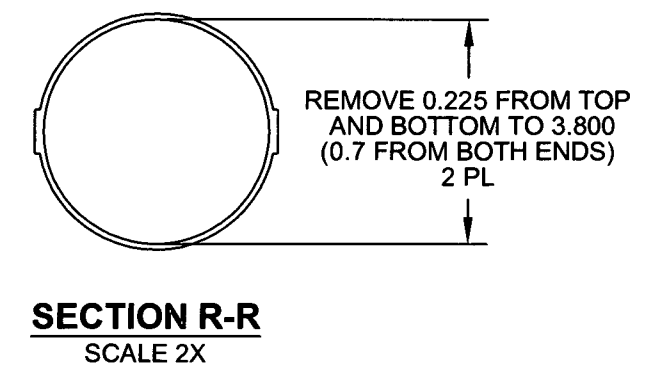
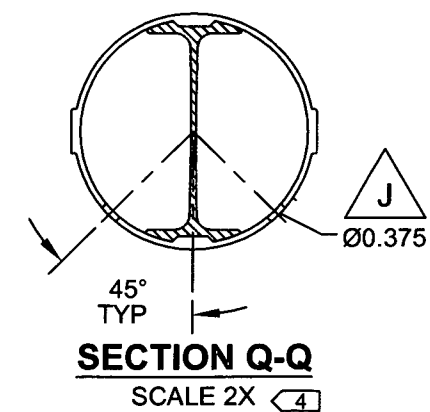
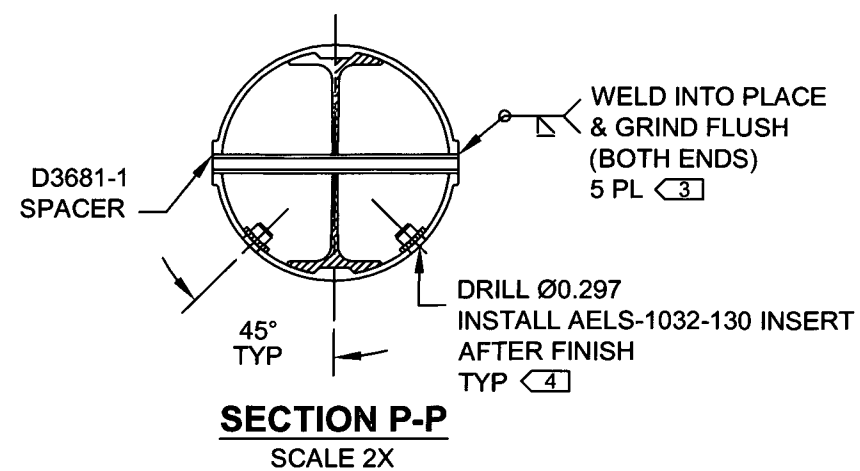
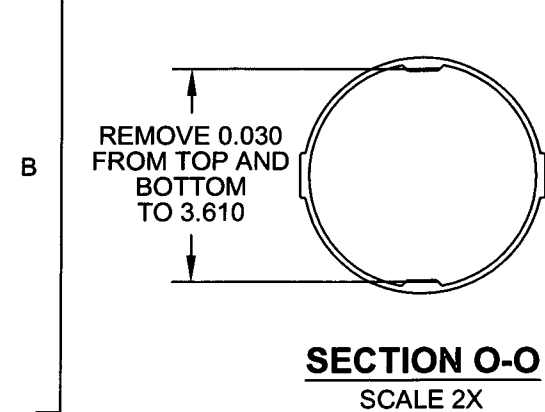
**SECTION N-N**  
SCALE 2X

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APPROVED	<i>[Signature]</i>	TITLE	SCALE
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# **D3391-023 MID TUBE ASSEMBLY**



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## **D3391-023 MID TUBE ASSEMBLY PARTS LIST**

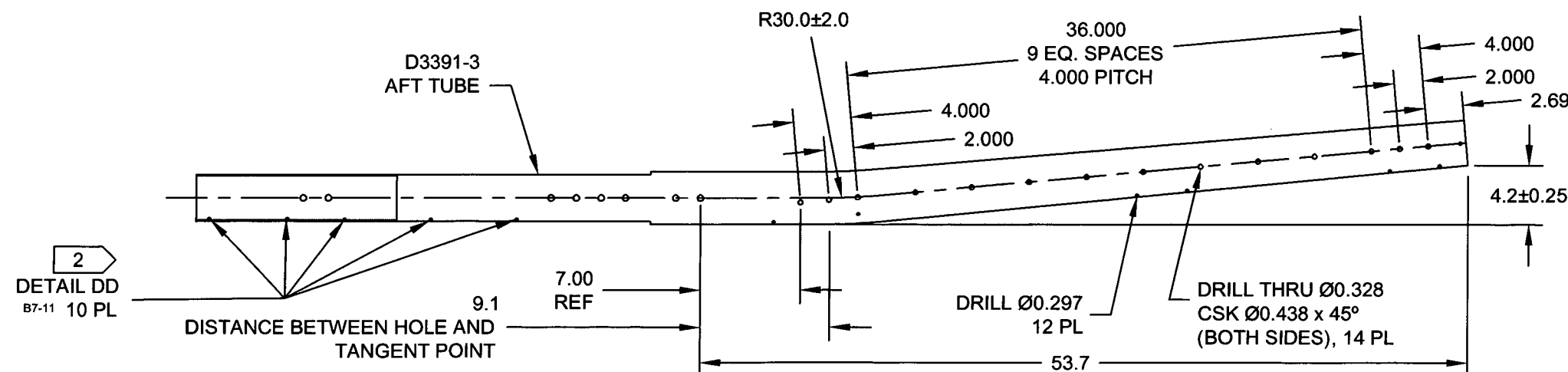
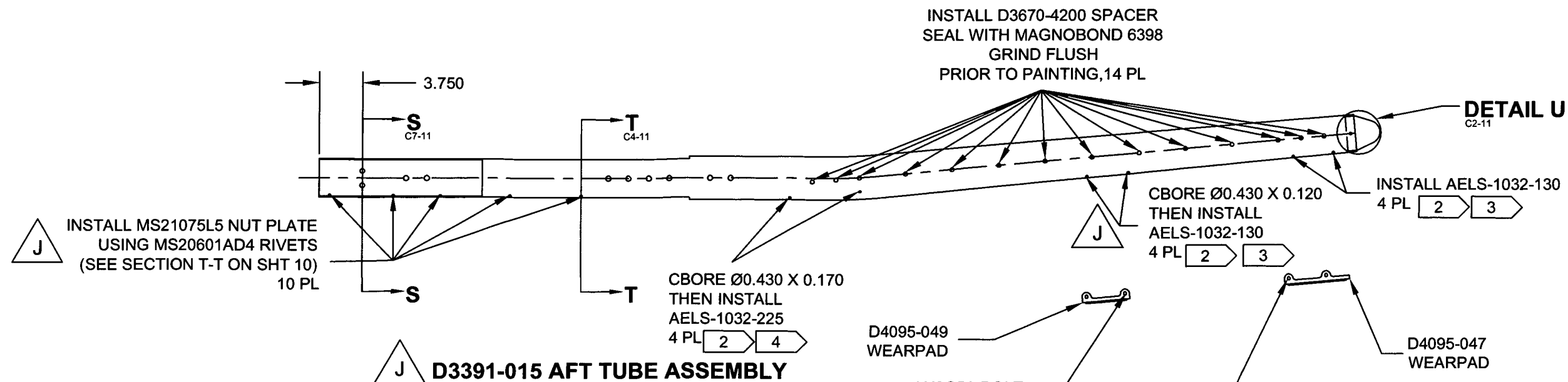
QTY -023	PART NUMBER	DESCRIPTION
X	D3391-023	MID TUBE ASSEMBLY
1	D2500-1-100	EXTRUSION
1	D3389-1	WEB
5	D3681-1	SPACER
20	AELS-1032-130	INSERT



## **D3391-023 MID TUBE ASSEMBLY**

- 1) MATERIAL: MAKE FROM D2500-1-100
- 2) INSTALL D3389-1 WEB TO OUTER TUBE USING SIKAFLEX-241/-291 PER QSI 015
- 3) WELDING: PER DART QSI 004
- 4) USE DART DRILL TEMPLATE DT8217 TO LOCATE AND DRILL Ø0.297 AND Ø0.375 HOLES FOR WEARSHOE INSERTS AND NUTPLATES. CBORE AS NOTED AND INSTALL INSERT/NUTPLATES EXCEPT WHERE INDICATED.

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

**D3391-015 AFT TUBE ASSEMBLY PARTS LIST**

QTY -015	PART NUMBER	DESCRIPTION
X	D3391-015	AFT TUBE ASSEMBLY
1	D2646	AFT CAP
1	D3391-3	AFT TUBE
14	D3670-4200	SPACER
2	D3672-1	WASHER
1	D4095-049	WEARPAD
1	D4095-047	WEARPAD
8	AELS-1032-130	INSERT
4	AELS-1032-225	INSERT
4	ALS4-428-165	INSERT
6	AN3C4A	BOLT
4	AN3C5A	BOLT
20	MS20601AD4	RIVET, BLIND
10	MS21075L5	NUT PLATE, FLOATING
10	NAS1149C0332R	WASHER

**NOTES:**

- 1) COAT ALL EXPOSED FASTENERS WITH LPS "LPS PROCYON"
- 2) USE DART DRILL TEMPLATE DT8217 TO LOCATE AND DRILL Ø0.297 AND Ø0.375 HOLES FOR WEARSHOE INSERTS AND NUTPLATES. C'BORE AS NOTED AND INSTALL INSERT/NUTPLATES EXCEPT WHERE INDICATED.
- 3) ENSURE WALL THICKNESS IS BETWEEN 0.070 AND 0.130 BEFORE INSTALLING INSERT
- 4) ENSURE WALL THICKNESS IS BETWEEN 0.130 AND 0.225 BEFORE INSTALLING INSERT

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**J** INSTALL MS21075L5 NUT PLATE  
USING MS20601AD4 RIVETS  
(SEE SECTION T-T ON SHT 10)  
10 PL

**J** **D3391-025 AFT TUBE ASSEMBLY**

CBORE Ø0.430 X 0.170  
THEN INSTALL  
AELS-1032-225  
4 PL **2** **4**

INSTALL D3670-4200 SPACER  
SEAL WITH MAGNOBOND 6398  
GRIND FLUSH  
PRIOR TO PAINTING, 4 PL

CBORE Ø0.430 X 0.120  
THEN INSTALL  
AELS-1032-130  
4 PL **2** **3**

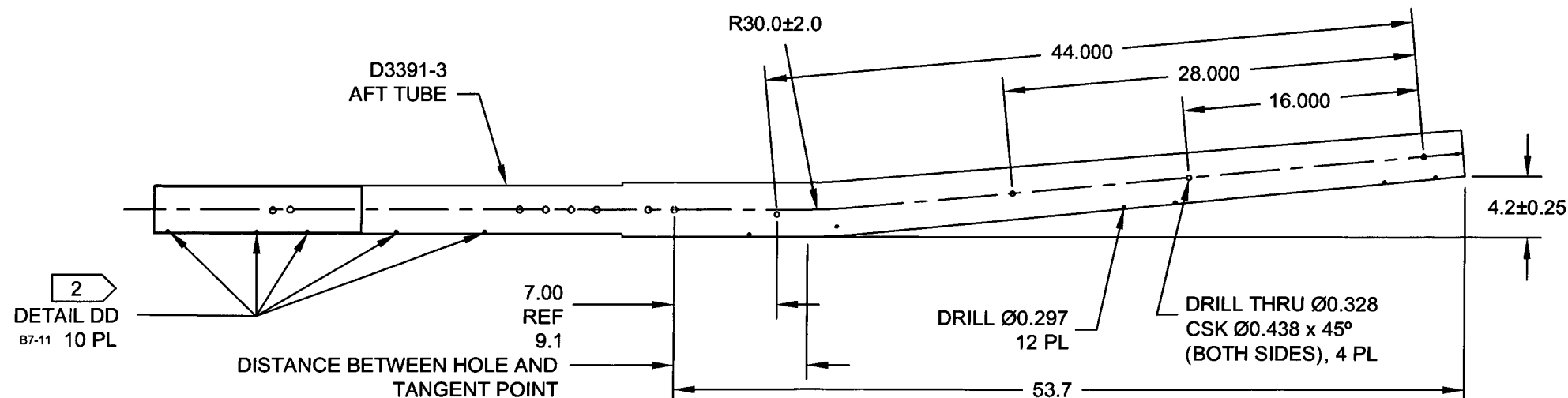
**DETAIL U**  
C2-11

D4095-049  
WEARPAD

AN3C5A BOLT  
NAS1149C0332R WASHER  
4 PL

D4095-047  
WEARPAD

AN3C4A BOLT  
NAS1149C0332R WASHER  
4 PL



**J** **BENDING AND DRILLING DETAIL**




**D3391-025 AFT TUBE ASSEMBLY PARTS LIST**

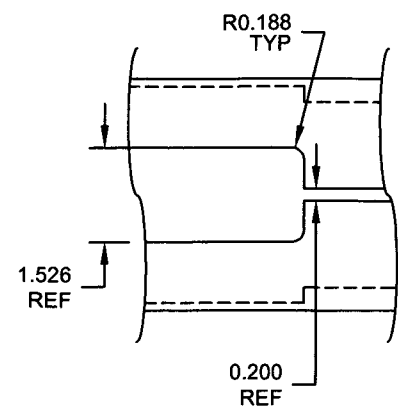
QTY -025	PART NUMBER	DESCRIPTION
X	D3391-025	AFT TUBE ASSEMBLY
1	D2646	AFT CAP
1	D3391-3	AFT TUBE
4	D3670-4200	SPACER
2	D3672-1	WASHER
1	D4095-049	WEARPAD
1	D4095-047	WEARPAD
8	AELS-1032-130	INSERT
4	AELS-1032-225	INSERT
6	AN3C4A	BOLT
4	AN3C5A	BOLT
20	MS20601AD4	RIVET, BLIND
10	MS21075L5	NUT PLATE FLOATING
10	NAS1149C0332R	WASHER

**NOTES:**

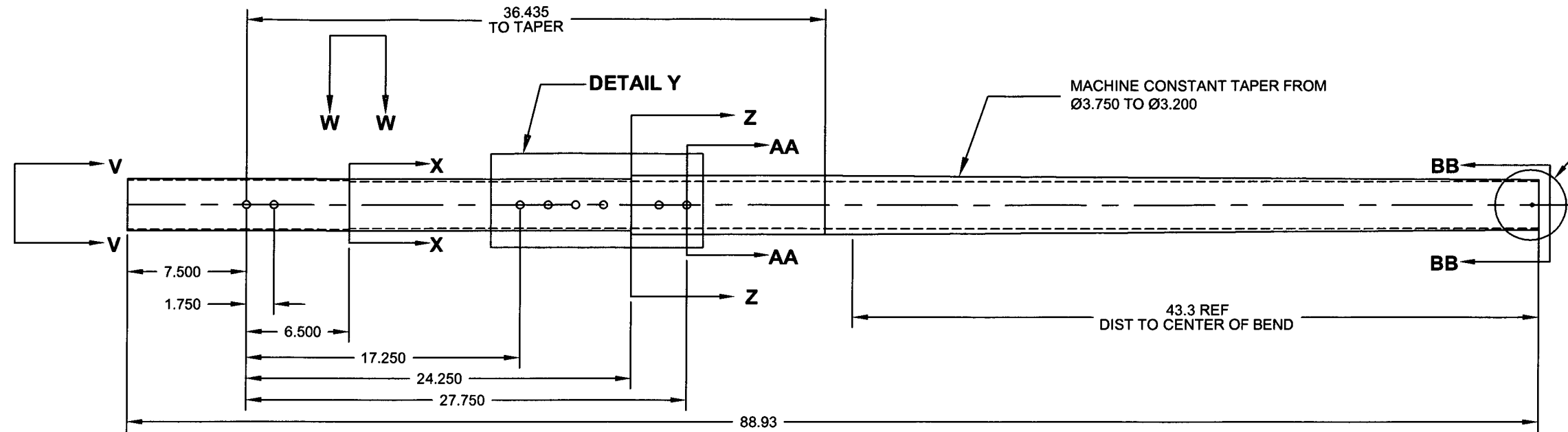
- 1) COAT ALL EXPOSED FASTENERS WITH LPS "LPS PROCYON"
- 2) USE DART DRILL TEMPLATE DT8217 TO LOCATE AND DRILL Ø0.297 AND Ø0.375 HOLES FOR WEARSHOE INSERTS AND NUTPLATES. CBORE AS NOTED AND INSTALL INSERT/NUTPLATES EXCEPT WHERE INDICATED. USE NUT PLATE DRILL JIG IF REQUIRED.
- 3) ENSURE WALL THICKNESS IS BETWEEN 0.070 AND 0.130 BEFORE INSTALLING INSERT
- 4) ENSURE WALL THICKNESS IS BETWEEN 0.130 AND 0.225 BEFORE INSTALLING INSERT

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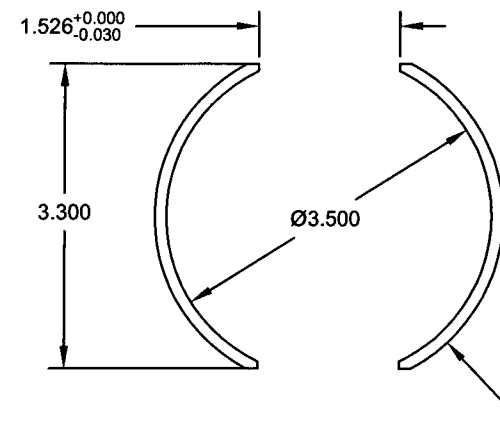
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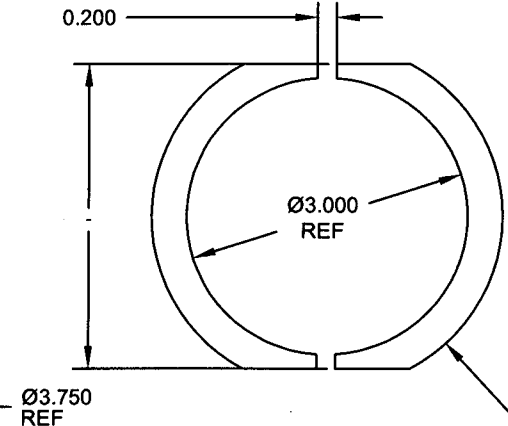
**VIEW W-W**  
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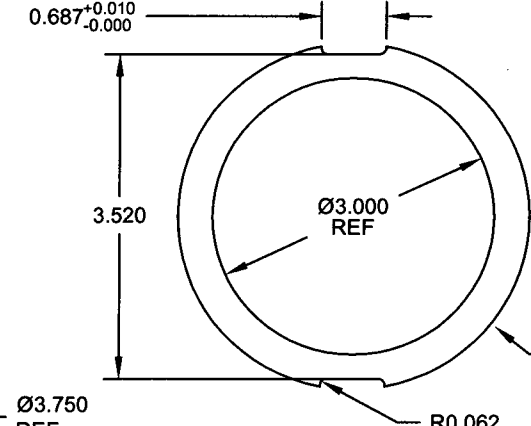
**D3391-3 AFT DRILLING AND CUTTING DETAIL**  
(MAKE FROM D6014-090)



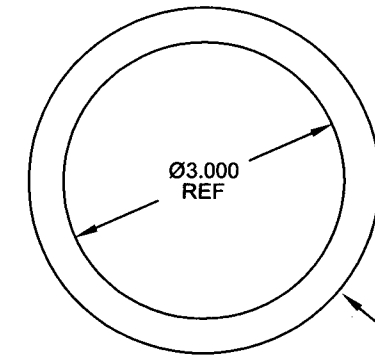
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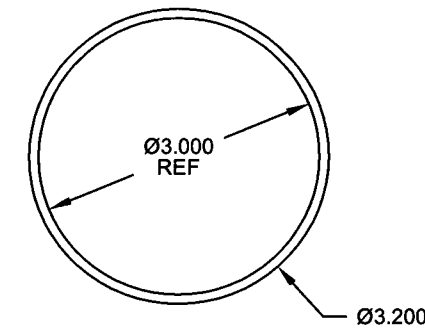
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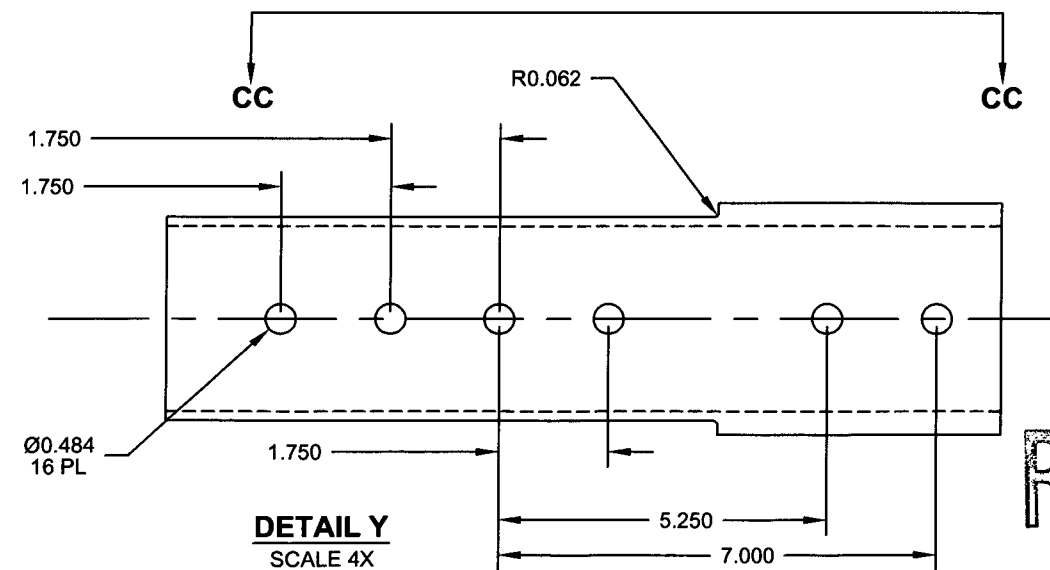
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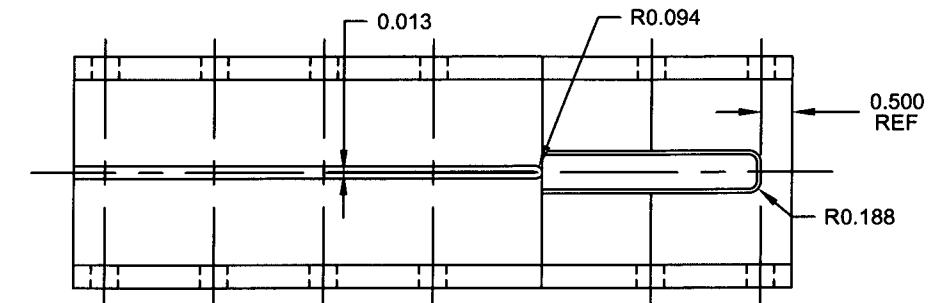
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**SECTION BB-BB**  
SCALE 4X



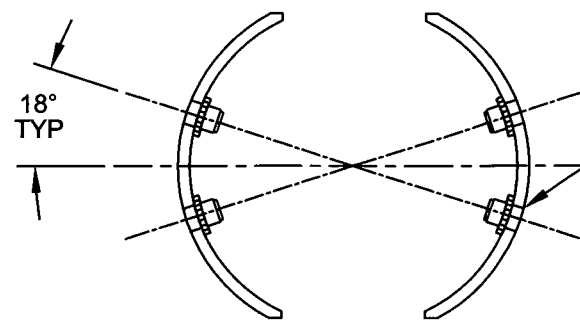
**DETAIL Y**  
SCALE 4X



**VIEW CC-CC**

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CHECKED	CP	DRAWING NO. D3391	REV. J
MFG. APPR.			SHEET 10 OF 11
APPROVED		TITLE 412 FLOAT SKIDTUBE	SCALE NTS
DE APPR.		COPYRIGHT © 2005 BY DART AEROSPACE USA, INC	
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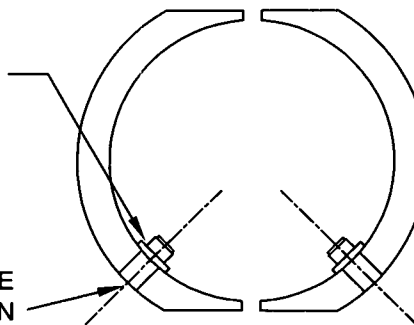


**SECTION S-S** D6-8,9  
SCALE 5X

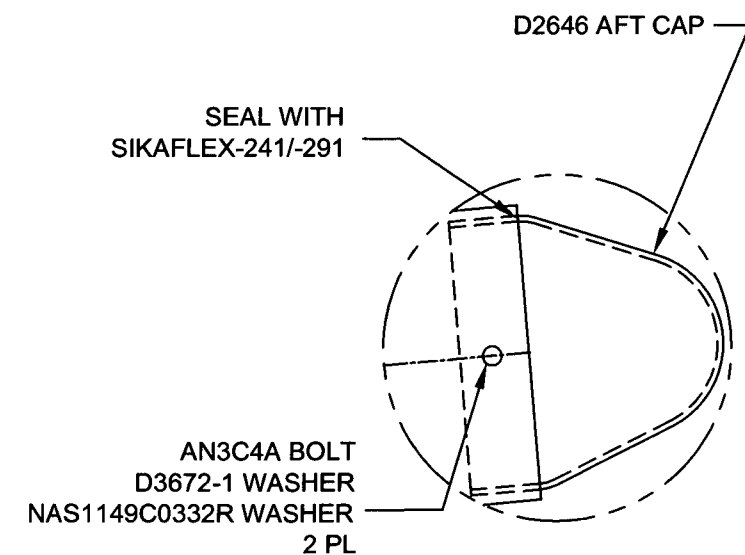
DRILL  $\varnothing 0.391$   
CBORE  $\varnothing 0.516 \times 0.040$  DEEP  
INSTALL ALS4-428-165 INSERT  
4 PL

USE DT8217 DRILL TEMPLATE  
TO LOCATE HOLES AND OPEN  
TO  $\varnothing 0.375$

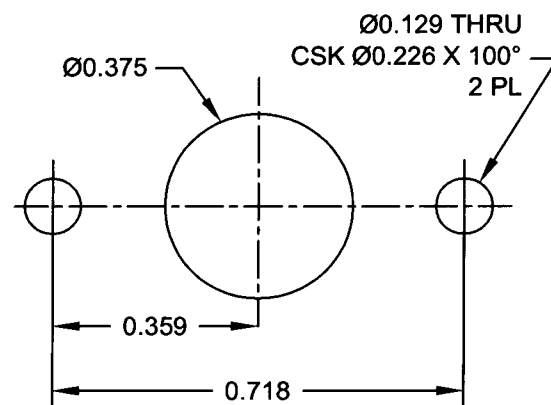
MS21075L5 NUTPLATE  
REF



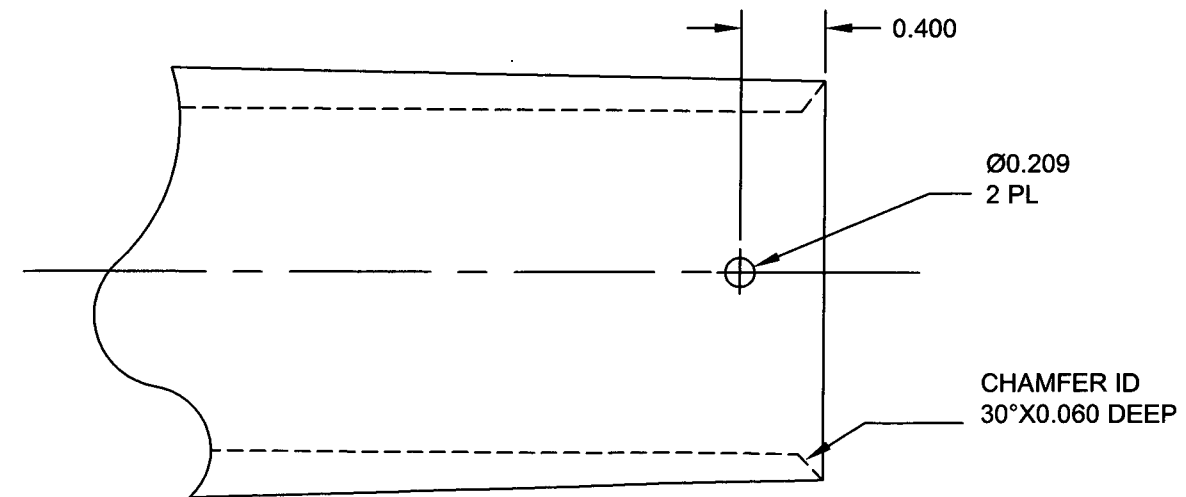
**SECTION T-T** D5-8,9  
SCALE 5X  
5 PL



**DETAIL U** D1-8,9  
SCALE 5X



**DRILLING DETAIL DD** B7-8,9  
SCALE 10X



**DETAIL EE** D1-11  
SCALE 2X

**NOTES:**  
1) USE INDUSTRY STANDARD NUT PLATE DRILL JIG IF REQUIRED.

**RELEASED**  
2016-04-28

DESIGN	PH	<b>DART AEROSPACE USA, INC</b>	
DRAWN	ML	EUGENE, OR	
CHECKED	CP	DRAWING NO. D3391	REV. J
MFG. APPR.		SHEET 11 OF 11	
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DE APPR.		AFT TUBE ASSEMBLY	NTS
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